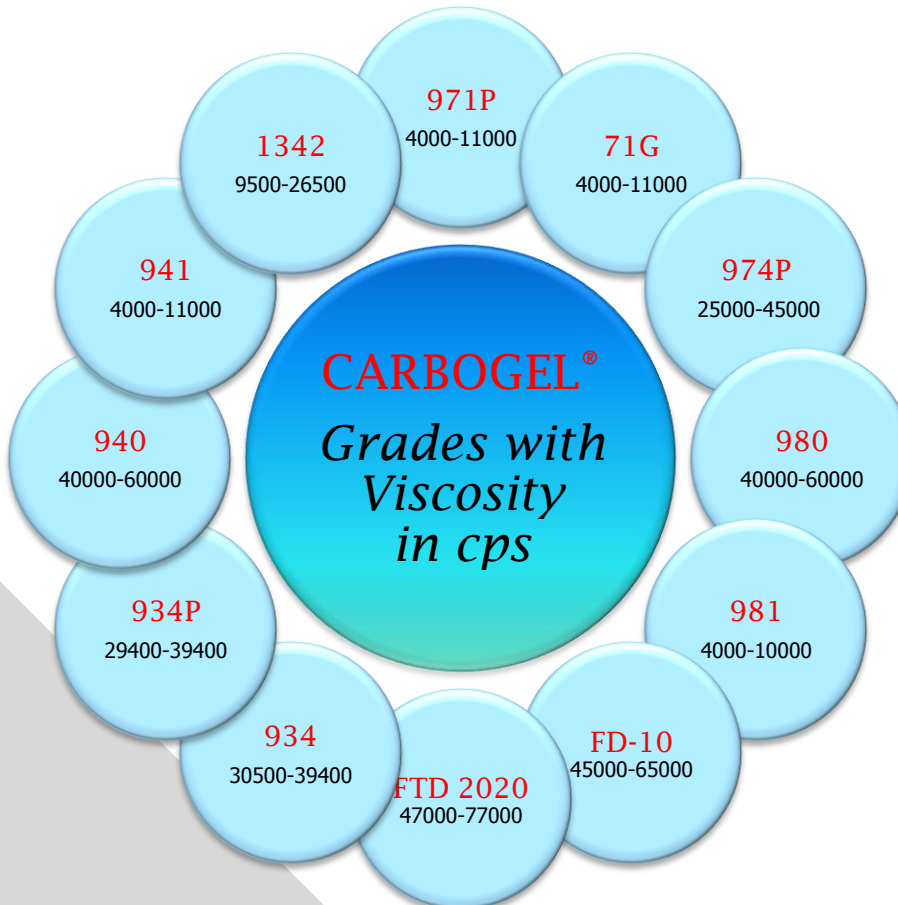


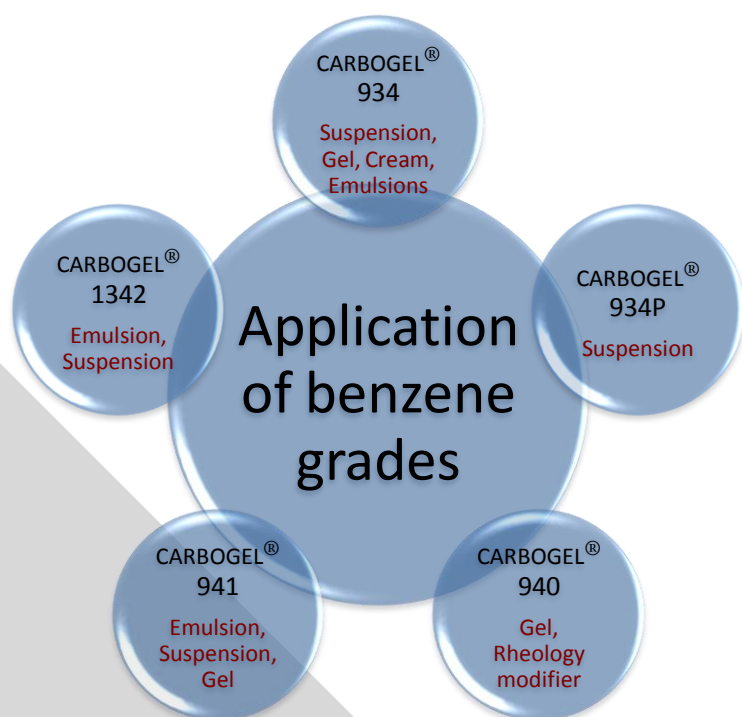
✓ We are the leading Manufacturer & Exporter since 1995 of Pharmaceuticals & Cosmetics inactive functionality raw materials having quality well accepted by customers globally.

✓ **CARBOGEL®** is a polymers of acrylic acid cross-linked with alkenyl ethers of sugars or poly alcohols.

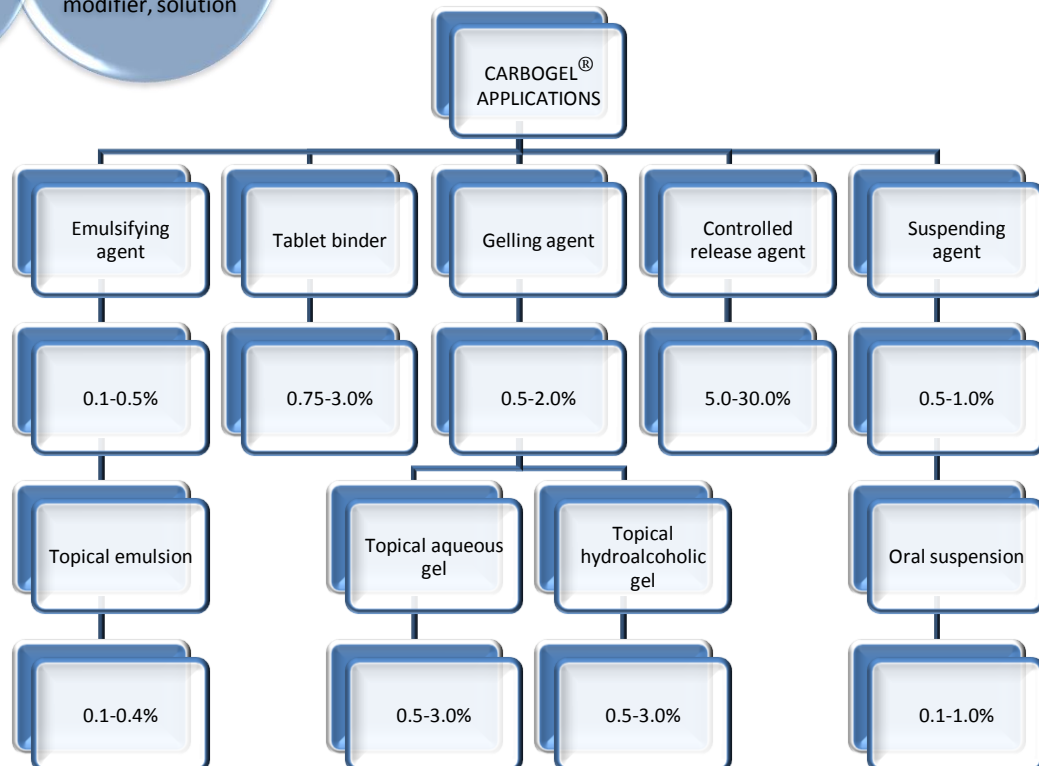
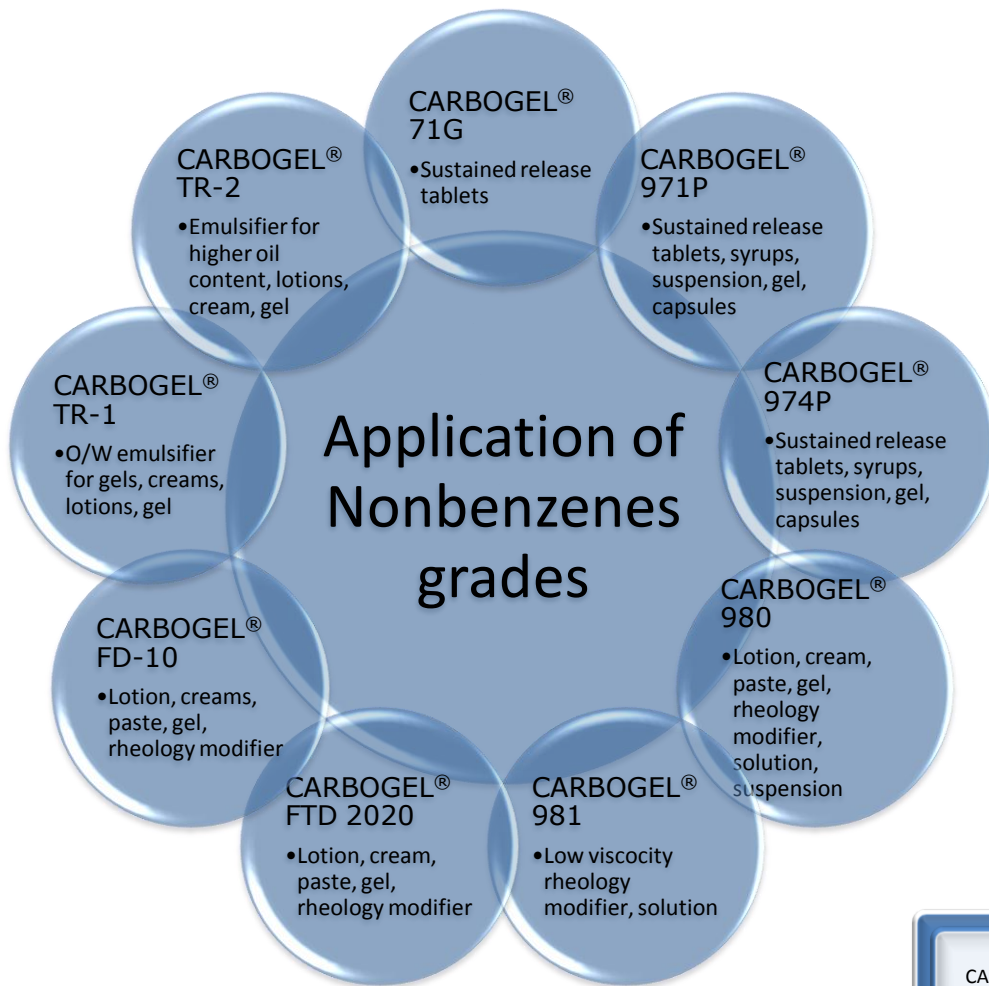
✓ High molecular weight macromolecules **CARBOGEL®** has high affinity towards water, alcohol, glycols & other solvents capable of hydrogen bonding.



Properties	Comparison of Various Benzene Grades of CARBOGEL®				
Trade name	CARBOGEL® 934	CARBOGEL® 934P	CARBOGEL® 940	CARBOGEL® 941	CARBOGEL® 1342
Polymer type	Homopolymer	Homopolymer	Homopolymer	Homopolymer	Copolymer
Assay (%)	56-68	56-68	56-68	56-68	52-62
Aqueous dispersion	0.5%	0.5%	0.5%	0.5%	1.0%
Viscosity (cps)	30500-39400	29400-39400	40000-60000	4000-11000	9500-26500
Spindle Number	6	6	7	5	6
Disk diameter (cm)	1.5	1.5	2.1	2.1	1.5
Cylinder height (cm)	0.2	0.2	0.2	0.2	0.2
Shaft diameter (cm)	0.3	0.3	0.3	0.3	0.3
Distance from top of cylinder to lower tip of shaft (cm)	3.02	3.02	5.0	2.7	3.02
Spindle Immersion depth (cm)	4.9	4.9	5.5	4.9	4.9
Spindle rotation (rpm)	20	20	20	20	20
Heavy metals (µg/g)	NMT 20	NMT 20	NMT 20	NMT 20	NMT 20
Loss on drying	NMT 2%	NMT 2%	NMT 2%	NMT 2%	NMT 2%
Limit of benzene	NMT 0.5%	NMT 0.01%	NMT 0.5%	NMT 0.5%	NMT 0.2%



Technical Specifications	
Appearance	White, fluffy, mildly acidic free flowing hygroscopic powders with characteristics slight odor
Solubility	Swells in water and glycerin after neutralization with ethanol.
pH of 1% solution	2.5-3.1
Temp. Stability	Stable below 100°C
Bulk density	0.176-240 g/cm ³
Specific gravity	1.41
Particle size	2-10µ
Molecular weight	76±4
Moisture content	2.0% w/w maximum
Equilibrium moisture content	8-10% w/w at humidity 50% RH & temperature 25°C
Glass transition temperature (Tg)	100-105°C



CARBOGEL® VARIOUS GRADES APPLICATIONS

CARBOGEL® 940 & CARBOGEL® 980
SPARKLING CLEAR TRANSPERANT GEL with water or hydroalcoholic medium.
 Most **EFFICIENT THICKNER** among all grades.
EXCELLENT SPARKLING & CRYSTAL CLEAR transparency at high viscosity.
 Wide use in **COSMETIC & EXTERNAL PHARMACEUTICAL** preparations.

CARBOGEL® 934 & CARBOGEL® 974
THICK FORMULATIONS like Gel,
TOPICAL EMULSIONS like skin, hair & moisture Creams.
PERMANANT STABILITY at high viscosity.
SHORT FLOW PROPERTIES in aqueous systems like cosmetics & spray.

CARBOGEL® 941 & CARBOGEL® 971
PERMANANT EMULSIONS & SUSPENSIONS at lower viscosities.
EXCELLENT TRANSPERANT GEL among other grades for Ionic System.
 More effective hydrogen bonding thickening than other grades of **CARBOGEL®**.
EMULSION STABILIZER in Cosmetic products.

CARBOGEL® 934P & CARBOGEL® 974P & CARBOGEL® 71G
HIGH PURITY GRADE for Oral Pharmaceutical Applications like gel, lotion, oral liquid, suspension & emulsion, ophthalmic gel/ointment,
TRANSDERMAL DRUG DELIVERY preparations
TASTE MASKING for certain APIs
TABLET BINDER
SUSTAIN RELEASES Formulations

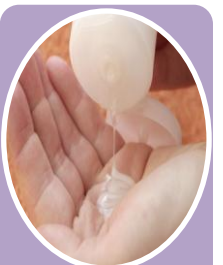
CARBOGEL® FTD 2020
FAST TO DISPERSE & most SALT TOLERANT compare to other **CARBOGEL®** grades
LESS TACKY FEEL than traditional **CARBOGEL®** grades
CLEAR, THICK GEL for ionic gel like aloe gel.
EXCELLANT CLARITY & VISCOSITY.



Bio-adhesives
 980
 940
 974P
 934P
 934
 1342
 TR-1
 TR-2
 971P
 981
 941
 71G
 FTD-2020



Suspensions
 974P
 934P
 971P
 71G



Lotions
 934
 934P
 974P
 971P
 981
 941
 1342
 TR-1
 TR-2
 FTD-2020
 FD-10



Creams
 940
 980
 974P
 934
 934P
 1342
 TR-1
 TR-2
 FTD-2020
 FD-10



Solid dosage
 71G
 971P
 974P
 934P



Gel
 940
 980
 934
 934P
 974P
 981
 1342
 941
 971P
 TR-1
 TR-2
 71G
 FTD-2020

CARBOGEL® different grades available for various dosage form



Neutralization is carried out under mild agitation with determination of proper selection of vehicle & quantity is calculated using equivalent weight.

Recommended neutralizers		
Neutralizer	Hydroalcoholic systems (upto %)	Approximate quantity for one part of polymer
Sodium hydroxide	20-30	2.3g
Potassium hydroxide	20-30	3.3g
Ammonium hydroxide	20-30	0.7g
Triethanolamine	60	1.5g
Tromethamine	60	1.3g
Aminomethyl propanol	80	0.95g

Neutralizing agents for CARBOGEL® in various solvents							
Neutralizing agent	NaOH	KOH	Ammonium solution	Triethanol amine/mono ethanol amine	Triethyl amine	Di-iso-propanol amine	Di (2-ethyl hexyl) amine
Solvent							
Water	•	•	•	•	•	•	
Methanol				•	•	•	•
Ethanol							•
Glycerin	•	•	•	•	•	•	•
Ethylene glycol	•	•	•	•	•	•	
Diethylene glycol			•		•	•	•
Propylene glycol			•	•	•	•	•
Alcohol / Water (60/40)	•	•		•	•	•	
Isopropanol / water (50/50)			•	•	•	•	•
Propylene glycol / Water (70/30)			•	•	•	•	

OUR PRODUCTS:

CARBOGEL® CARBOMERS (B.P.) (GRADES: 940 / 934 / 934P / 941 / 980 / 974 / 974P / 971 / FTD 2020 / FD-10)
HYSWEL® SODIUM STARCH GLYCOLLATE (I.P. / B.P. /U.S.P.) (MAIZE & POTATO STARCH BASE)
V-DI-SOL® CROSCARMELOSE SODIUM (N.F.)
LUBSOLV® SODIUM STEARYL FUMARATE (B.P. / E.P. / N.F.)
ENTRAGIT™ METHACRYLIC ACID CO-POLYMERS (N.F.) (GRADES: L-100 / L-100-55 / S-100)
PARABENS B.P. (Plain & Sodium)

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